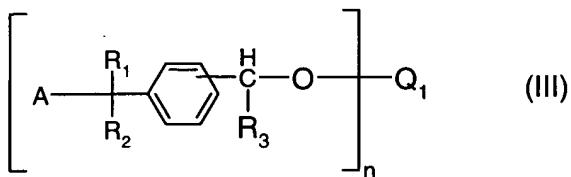
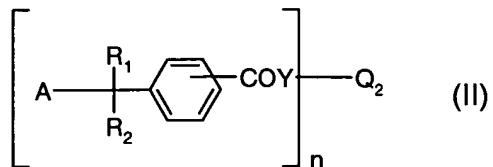
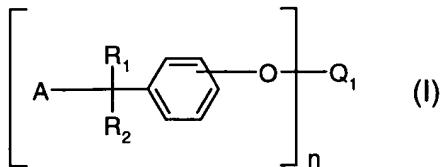


Abstract of the Invention

The invention pertains to a compound of formula (I), (II) or (III)

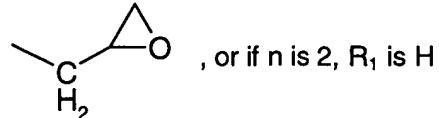


wherein R₁ and R₂ are independently of each other hydrogen, C₁-C₁₈alkyl, C₃-C₁₈alkenyl, C₃-C₁₈alkinyl or phenyl which are unsubstituted or substituted by NO₂, halogen, amino, hydroxy, cyano, carboxy, C₁-C₄alkoxy, C₁-C₄alkylthio, C₁-C₄alkylamino or di(C₁-C₄alkyl)amino;

A is a group capable of forming a stable free nitroxyl radical A•, which is bound via its oxygen atom to the carbon atom; Y is O, NR₃ or CHR₃-X_a, wherein X_a is O, S or NR₃;

R₃ is hydrogen, C₁-C₁₈alkyl, C₃-C₁₈alkenyl, C₃-C₁₈alkinyl or phenyl which are unsubstituted or substituted by NO₂, halogen, amino, hydroxy, cyano, carboxy, C₁-C₄alkoxy, C₁-C₄alkylthio, C₁-C₄alkylamino or di(C₁-C₄alkyl)amino; Q₁ is an organic or inorganic radical, derived from a compound having at least one functional group being capable of reacting with a hydroxy group; Q₂ is an organic radical derived from a mono or polyfunctional alcohol, mono or polyfunctional aminoalcohol, mono or polyfunctional amine mono or polyfunctional mercaptane, mono or polyfunctional phenol or mono or polyfunctional thiophenol; and n is a number from 1 to 20;

with the proviso, that in formula (I) if n is 1, Q₁ is not



and R₂ is -CH₂-O-tert-butyl, A is not 2,2,6,6-tetramethylpiperidine or 2,2,6,6-tetramethylpiperidine-4-carboxylic acid. Further subjects of the invention are a composition comprising above compounds and at least one ethylenically unsaturated monomer, process for polymerization and the (co)polymers obtained therefrom.

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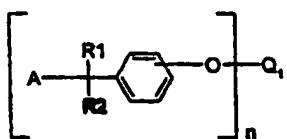
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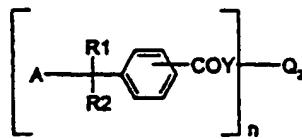
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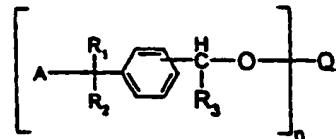
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(54) Title: MONO AND MULTIFUNCTIONAL ALKOXYAMINES FOR THE PREPARATION OF FUNCTIONALIZED
MACROMERS

(I)



(II)



(III)

A2

WO 01/02345

(57) Abstract: The invention pertains to a compound of formula (I), (II) or (III) wherein R₁ and R₂ are independently of each other hydrogen, C₁-C₁₈alkyl, C₃-C₁₈alkenyl, C₃-C₁₈alkinyl or phenyl which are unsubstituted or substituted by NO₂, halogen, amino, hydroxy, cyano, carboxy, C₁-C₄alkoxy, C₁-C₄alkylthio, C₁-C₄alkylamino or di(C₁-C₄alkyl)amino; A is a group capable of forming a stable free nitroxyl radical A·, which is bound via its oxygen atom to the carbon atom; Y is O, NR₃ or CHR₃-X₂, wherein X₂ is O, S or NR₃; R₃ is hydrogen, C₁-C₁₈alkyl, C₃-C₁₈alkenyl, C₃-C₁₈alkinyl or phenyl which are unsubstituted or substituted by NO₂, halogen, amino, hydroxy, cyano, carboxy, C₁-C₄alkoxy, C₁-C₄alkylthio, C₁-C₄alkylamino or di(C₁-C₄alkyl)amino; Q₁ is an organic or inorganic radical, derived from a compound having at least one functional group being capable of reacting with a hydroxy group; Q₂ is an organic radical derived from a mono or polyfunctional alcohol, mono or polyfunctional aminoalcohol, mono or polyfunctional amine mono or polyfunctional mercaptane, mono or polyfunctional phenol or mono or polyfunctional thiophenol; and n is a number from 1 to 20; with the proviso that in formula (I) if n is 1, Q₁ is not (a), or if n is 2, R₁ is H, and R₂ is -CH₂-O-tert.butyl, A is not 2,2,6,6-tetramethylpiperidine or 2,2,6,6-tetramethylpiperidine-4-carboxylic acid. Further subjects of the invention are a composition comprising above compounds and at least one ethenically unsaturated monomer, process for polymerization and the (c)polymers obtained therefrom.